26612

|0.1300

P/032/60/007/003/002/002
D259/D301

AUTHORS: Prosnak, Włodzimierz, J., and Kucharzyk, Piotr
            (Warsaw)

TITLE: On a profile with blowing aileron or flap

PERIODICAL: Archiwum budowy maszyn, v. 7, no. 3, 1960, 313 - 333

TEXT: This article was delivered by P. Kucharczyk at the 1959,
September 7 - 13 conference on the Zakład Mechaniki Cieczy i
Gazow IPPT - PAN (PAS - IPPT Section of the Mechanics of Liquids
and Gases), in Augustow. The purpose of the authors' work was
to examine the aerodynamic properties of profiles with blowing
ailerons or flaps. Experiments carried out by the Katedra aero-
dynamiki politechniki Warszawskiej (Aerodynamics Department of
the Warsaw Polytechnic) on the flow around the airfoil with a
jet flap only in the central section of the span, shows that an
increase of the angle of attack appears also at the end section
of the airfoil not directly affected by the jet. The effect of
the jet preventing the separation of the boundary layers is ev-

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On a profile with blowing...

ident only in the central section under the direct influence of
the jet. It was further established that with a blowing jet, the
separation of the boundary layers from the airfoil end sections
occurs at smaller angles of attack than without the help of the
jet. For their treatment of the problem, the authors assumed a
steady flow of an ideal fluid. The airfoil profile and the ail-
eron, as well as the mechanical flap, w re represented by rec-
tilinear sections and the jet sheet in the trailing edge of the
airfoil profile by a jet source on the profile proper. On the
basis of these ideal conditions, the authors derived the formu-
las for the lift, momentum and drag coefficients through math-
ematical treatment, based to some extent on the conformal repre-
sentations given by J. Bonder, on the magnitudes for circular
flow governed by Zukowski's condition /-Abstracter's note:
Condition not defined_7 and on the Blasius-Czaplygin /-Abstrac-
ter's note: Not defined_7 equations. The lift is expressed
by the formula

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On a profile with blowing...

$$c_y = f_1 (\alpha, \beta, \delta_1, \delta_2, \delta_3) + f_2(c_j, \alpha, \beta, \delta_1, \delta_2, \delta_3) \quad (48)$$

and the drag by formula   (44)

$$c_x = -c_j$$

where α is the angle of attack; β, the flap angle; c_j, the flow coefficient, δ_1, δ_2, and δ_3, the geometrical parameters, The functions f_1 and f_2 are defined parametrically by mathematical calculation. There are 6 figures and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: W. Prosnak and P. Kucharczyk: The Influence of the Ground on the Aerodynamic Properties of an Airfoil with Jet Flap, "Archiwum Mechaniki Stosowanej", PWN, Warsaw 1959, vol. 11, no. 4 (475 - 509) and W. Prosnak: Theory of Two-Dimensional Aerofoil with Jet Flap, "Archiwum Mechaniki Stosowanej", PWN, Warsaw 1958, vo. 10, no.

Card 3/4

On a profile with blowing...

1 (3 - 24).

P/032/60/007/003/002/002
D259/D301

ASSOCIATION: Katedra aerodynamiki politechniki Warszawskiej
(Aerodynamics Department of the Warsaw Polytech-
nic Institute)

SUBMITTED: February, 1960

Card 4/4

37959

P/032/62/009/001/004/004
D265/D308

96 4/00

AUTHORS: Prosnak, Włodzimierz, Juliusz and Łuczywek, Eugeniusz
              (Warsaw)

TITLE: Weighing machine for testing propellers rotating in
              opposite directions

TEXT: In order to investigate the mutual influence of two concen-
trically positioned propellers running in opposite directions under
various working conditions the test rig has been designed in order
to measure simultaneously the drags and torques of each of the two
propellers revolving at various speeds, at varied distances and
with different positions of blade angles. The best rig was used in
the wind tunnel (1120 mm air flow area) at the Department of Aero-
dynamics of the Warsaw Polytechnic Institute. The performance of
the model was studied in order to verify its suitability for dimen-
sional analysis purposes when designing full scale test rig for full
size propellers. The authors give descriptions and drawings of hub
arrangement for adjusting blade angles, the Wheatstone bridge cir-
Card 1/2

Weighing machine for testing ...

P/032/62/009/001/004/004
D265/D308

cuits for measuring the deflection of springs using tensometers, the 3-phase electric motor drive where the variable speeds have been obtained by changing the frequency according to the principle due to J. Bukowski (Zeszyt Instytutu Aerodynamicznego, Warszawa 1939 - no. 7) and the calibration apparatus. The description of the test procedure, the results of the preliminary tests performed on two-bladed adjustable propellers of known characteristics and the discussion on the reliability and suggestions for improvement conclude the paper. There are 20 figures.

ASSOCIATION: Katedra aerodynamiki politechniki Warszawskiej (Department of Aerodynamics of the Warsaw Polytechnic Institute)

SUBMITTED: October 1961

Card 2/2

PROSNAK, Wlodzimierz J.

On the viscous flow near the stagnation point on an interface.
Archiw mech 14 no.3/⬛:505-542 '62.

1. Department of Fluid Mechanics, Institute of Basic Technical
Problems, Polish Academy of Sciences, Warsaw.

PROSNAK, Włodzimierz J. (Warszawa)

On a certain property of two-dimensional flows with slip lines.
Archiw bud masz 9 no.2:273-274 '62.

PROSNAK, Wlodzimierz J. (Warszawa)

A note on the application of Pohlhausen's method to the
stagnation point flow. Archiw bud masz 10 no.1:3-14 '63.

L 22603-65   EWT(1)/EWP(m)/EWG(v)/FCS(k)   Pd-1/Pe-5   WW
                                    P/0033/64/016/003/0689/0708
ACCESSION NR: AP5001257

AUTHOR: Prosnak, W. J. (Warsaw)

TITLE: The asymmetric hypersonic blunt-body problem

SOURCE: Archiwum mechaniki stosowanej, v. 16, no. 3, 1964, 689-708

TOPIC TAGS: shock wave physics, flow field, blunt body problem, supersonic flow, asymmetric case

ABSTRACT: The direct problem of calculating the two-dimensional, steady, rotational, inviscid flow field between a profile at an angle of attack α and a detached shock wave in the region limited by sonic lines is discussed. The value of the ratio of specific heats of the gas is assumed to be the same on both sides of the shock and through the entire field. Reas gas effects are not considered. The first approximation of the method integral relations proposed by Dorodnitsyn is applied here to asymmetric blunt-body flows. Three partial differential equations (the continuity and momentum equations) describing the flow are reduced to three ordinary differential equa-

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L 22603-65
ACCESSION NR: AP5001257

tions with unknown initial values for the sought functions (the
nondimensional velocity at the body $v_b(s)$, the shock-wave angle $\sigma(s)$,
and the shock wave distance $\delta(s)$. A fourth ordinary differential for
calculating streamlines is added on the strength of the assumption
that the stream function ψ must be constant along a streamline. The
first three ordinary differential equations are integrated from the
chosen initial point and with chosen initial values, the stagnation
point being selected as the starting point in this instance. As the
three initial values (the shock-wave distance δ_0 , the shock wave
angle σ_0 , and the position (coordinate) of the stagnation point x_0)
are unknown, three conditions are imposed: two conditions are pro-
vided by two sonic points on the profile (the velocity slope remains
finite), and the third states that the maximum entropy streamline is
identical with the "stagnation streamline". The calculations consist
of two parts: 1) computation of the initial values x_0, σ_0, and δ_0
by means of an iteration method; and 2) computation of final results
such as the velocity and pressure distributions along the body and
along the shock, of the stagnation streamline, and the critical line,
the characteristic directions along the critical line, et cetera.
Flow charts of the methods for computing x_0, σ_0, and δ_0, also for

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ACCESSION NR: AP5001257

computing the streamlines and their sonic points are presented. Tabu-
lated initial values of x_0, σ_0, and δ_0 for $M\infty = 3$, the adiabatic
exponent $X = 1.4$, and a prolate elliptic profile with a ratio of axes
$a/b = 4$ are given for five angles of attack $\alpha = 0$, 1, 2.5, 5, and
7.5^0. The velocity distribution $v_b(x)$, the pressure distribution on
the body $p_b(x)$, the density distribution $\rho_b(x)$, also the distributions
of the shock stand-off distance $\delta(x)$ and the shock wave angle $\sigma(x)$
are given for $\alpha = 0^0$ and $\alpha = 7.5^0$. Orig. art. has: 12 figures and
2 tables.

ASSOCIATION: Department of Mechanics of Fluids, IBTP, Polish Academy
of Sciences

SUBMITTED: 00   ENCL: 00   SUB CODE: AS, ME

NO REF SOV: 010   OTHER: 011

Card 3/3

L 02204-67   EWP(m)   WW

ACC NR: AP6032601   SOURCE CODE: PO/0032/66/013/003/0357/0363

AUTHOR: Klonowska, Maria E. (Warsaw); Luczywek, Eugeniusz (Warsaw); Prosnak, Wlodzimierz J. (Warsaw)

ORG: none

TITLE: Mach number and specific heat ratio effects in axisymmetric flow on the distance of the shock wave

SOURCE: Archiwum budowy maszyn, v. 13, no. 3, 1966, 357-363

TOPIC TAGS: detached shock wave, axisymmetric flow, stagnation point, shock wave physics, axisymmetric supersonic flow, shock stand off distance, Mach number effect, specific heat ratio effect, integral relation computation method, computer programming/GIER digital computer

ABSTRACT: The distance between a detached shock wave and the stagnation point on the flat nose of a circular cylinder in axisymmetric supersonic flow was computed by the integral relations method, in order to investigate the influence of the Mach number and the specific heat ratio on shock standoff distance. The computa-

Card 1/2

L 02204-67

ACC NR: AP6032601

tions were performed in 20 cases with different Mach numbers and specific heat ratios. The programming for the GIER digital computer used was developed by co-author Luczywek. Comparison of computed values and experimental data yielded no essential discrepancies. Orig. art. has: 4 figures, 1 table, and 4 formulas. [Based on authors' abstract]

SUB CODE: 09, 20/ SUBM DATE: 00Nov65/ ORIG REF: 002/ SOV REF: 001/ OTH REF: 001/

Card 2/2

PROSNAK-IRZYKIEWICZ, Irena

Changes in the composition of blood serum proteins in renal
diseases. Lodz. tow. nauk. [IV] 60:7-44 '64.

PROSNYAKOV,A.V.

Geological structure of the Rakhov Massif.   Trudy Akad. neft.
prom. no.2:108-118 '55.   (MLRA 8:5)
            (Rakhov Massif--Geology)

ANTSUPOV, P.V.; BORODATYY, I.I.; ORLOV, A.A.; PROSNYAKOV, A.V.

Prospects for finding commercial gas in the Bukovina part of the outer zone of the Carpathian piedmont fault. Neftegaz. geol. i geofiz. no.3:37-38 '65.   (MIRA 18:7)

1. Trest "L'vovneftegazrazvedka".

9 Gold-bearing deposits in Eastern Transbaikal. M. P. Prosnyakov. *Sovet. Zolotoprom.* 1936, No. 3, 31-4. — The quartz-tourmaline and sulfide gold-bearing belt extends for about 400 km. along the Shilka and Amur rivers from the Darasunskii district to the Amazar river. There are also gold-bearing veins of quartz-porphyrite. B. Z. K.

CA

Gold-bearing deposits in Eastern Transbaikal. M. P.
Prosnyakov. *Sovet. Zolotoprom.* 1936, No. 3, 31 4.—The
quartz-tourmaline and sulfide gold-bearing belt extends
for about 400 km. along the Shilka and Amur rivers from
the Daraunakii district to the Amazar river. There are
also gold-bearing veins of quartz-porphyrite. B. Z. K.

METALLURGICAL LITERATURE CLASSIFICATION

KOSMACHEV, A.Ye. [deceased]; KHOKHLOVA, Yu.M.; KALMYKOVA, G.Ya.;
PROSNYAKOVA, I.M.; SERGEYEVA, L.N.

Production and isolation of an antibiotic from the thermophilic
Actinomyces T-12/3. Mikrobiologiia 34 no.3:437-441 My-Je '65.
(MIRA 18:11)

1. Institut mikrobiologii AN SSSR.

PROSOCHKIN, V.M., gornyy inzh.

Stripping operations under difficult mining engineering
conditions. Gor. zhur. no.10:77-78 O '65.   (MIRA 18:11)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu
predpriyatiy gornorudnoy promyshlennosti, Leningrad.

BEDNYKH, V., prepodavatel'; IVANOV, A., instruktor; KONOVALOV, N., prepoda-
vatel'; NESTEROV, N.; PROSOLOV, G., instruktor

Suggestions of active members of the All-Union Volunteer Society for
Assistance to the Army, Air Force, and Navy. Za rul. 17 no.1:6
Ja '59.   (MIRA 12:3)

1. Nachal'nik avtomotokluba, Orenburgskaya oblast' (for Nesterov).
                        (Automobile drivers)

A   L 11520-66   EWT(m)/EWP(j) --- RPL   WW/RM

SOURCE CODE: UR/0190/65/007/012/2146/2149

ACC NR: AP6001870

AUTHORS: Kuznetsov, Ye. V.; Fayzullina, D. A.; Fayzullin, I. N.; Prosolova, T. N.;
Avvakumova, N. I.

ORG: Kazan' Chemico-Technical Institute im. S. M. Kirov (Kazanskiy khimiko-
tekhnologicheskiy institut)

TITLE: Interaction of aromatic disulfochlorides with dimethylol-containing organo-
phosphorus compounds. 2nd communication in the series Phosphorus-containing poly-
sulphonates

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 12, 1965, 2146-2149

TOPIC TAGS: polymer, polymerization, organic phosphorus compound, organic sulfur
compound, sulfonic acid, Organic synthetic process

ABSTRACT: This work was performed to extend the previously reported results of
Ye. V. Kuznetsov, D. A. Fayzullina, and R. P. Tyurikova (Vysokomolek. soyed., 7,
761, 1965) and particularly to investigate the possibility of synthesizing linear
polysulphonates on the basis of aromatic disulfochlorides and dimethyl-containing
phosphorus organic compounds. The following phosphorus-containing polysulfonates
based on bis-methylolphosphinic acid] propyl-, isopropyl-, isobutyl-, dimethylol-
phosphines and benzene-, toluene-, chlorobenzene-, diphenyl-, naphthalinedisulfo-
chlorides were synthesized. The reactions were carried out either in the melt or

UDC: 541.64+678.86

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L 11520-66

ACC NR: AP6001870

in n-heptane at 70—130C.   Several physical properties, e.g., refractive index, solubility, viscosity, etc. were studied, and the results were tabulated. It was found that polysulfonates derived from bis-methylol-phosphinic acid hardened when treated with diisocyanates. Orig. art. has: 2 tables and 4 equations.

SUB CODE:0711/ SUBM DATE: 29Jan65/ ORIG REF: 003/

Card 2/2

5A

A 5 3
h

217. Temperature dependence of velocity of ultrasound in liquids. P. PROKOROV AND V. NOZDREV. *J. of Exp. and Theor. Phys. U.S.S.R., 9, 5, pp. 625-629, 1939. In Russian.*—The authors describe and discuss the results of their experiments on the velocity of ultrasound in organic liquids, and water as a function of temperature from -70° C. to 110° C.   D. S.

PROSOVICH, P.A., inzh.; YATSENKO, V.A., inzh.

Automatic continuous ore discharge from bunkers. Mekh.i avton.
proizv. 18 no.2:3-6 F '64.

(MIRA 17:4)

PROSPEKHOV, D.O.

CA

PROCESSES AND PROPERTIES INDEX

Synthesis of methanol at low pressures. D. O. Prospekhov. *Mem. Inst. Chem. Acad. Sci. Ukraine, & S. R.* 4, 411 (in Russian 412, in German 413 (1937). MeOH was prepd. by passing CO and H₂ over the catalyst Cu₄(ZnO)₁₀(Cr₂O₃)₄ at temp. up to 300° and at pressures of 30–40 up to 120 atm. At 40–50 atm. and a temp. of 240°, the yield of MeOH was 0.51 g./ml. per kg. of catalyst per hr. Under pressures of 70 atm. and 120 atm., the initial yield of MeOH reaches 1.11 and 2.57 l., resp., but it drops rapidly. At 90–10 atm. there was no noticeable drop in MeOH yield. The crude MeOH had 2.6 dS°. H₂O). H. Z. Kamich

IO

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROSPEKHOVA, G.P.; GENERALOV, V.I.

Pharmacology of semicarbazide hydrochloride. Farm. i toks. 24
no.5:623-625 S-O '61.   (MIRA 14:10)

1. Kafedra farmakologii, farmatsii i farmakognozii (zav. -
zasluzhennyy deyatel' nauki prof. N.V.Lazarev) Voyenno-meditsinskoy
ordena Lenina akademii imeni S.M.Kirova.
                           (SEMICARBAZIDE)

TROSHIN,A.S., otv. red.; ARRONET,N.I., red.; BEYYER,T.V., red.;
ZHIRMUNSKIY,A.V., red.; KUSAKINA,A.A., red.; PROSSER,
K.L., red.; LOZINA-LOZINSKIY,L.K., red.; POLYANSKIY,
Yu.I., red.; SUKHANOVA,K.M., red.; USHAKOV,B.P., red.;
FEL'DMAN,N.L., red.; ALEKSANDROV, V.Ya., red.

[Cell and the temperature of the medium; transactions]
Kletka i temperatura sredy; trudy. Moskva, Nauka, 1964. 303 p.
                                        (MIRA 18:1)

1. International Symposium on Cytoecology, Leningrad, 1963.
2. Institut tsitologii AN SSSR, Leningrad (for Troshin,
Arronet). 3. Laboratoriya kosmicheskoy biologii Instituta
tsitologii AN SSSR, Leningrad (for Lozina-Lozinskiy).4. La-
boratoriya tsitofiziologii i tsitoekologii Botanichskogo in-
stituta im. V.L.Komarova AN SSSR, Leningrad (for Aleksandrov).
5. Laboratoriya sravnitel'noy tsitologii Instituta tsitologii
AN SSSR, Leningrad (for Zhirmunskiy, Kusakina, Ushakov).
6. Laboratoriya tsitologii odnokletochnykh organizmov Instituta
tsitologii AN SSSR, Leningrad (for Sukhanova). 7. Botaniche-
skiy institut imeni V.L.Komarova AN SSSR, Leningrad (for Arronet).

PROSSER, V.

Distr: 4E2c(m)/4E3c 2 cys

i / The optical constants of single crystals of hexagonal selenium. V. Prosser (Karlova Univ., Prague). Czechoslov. J. Phys. 10, 306-18(1960)(in English).—The author investigates the optical consts. of single crystals of hexagonal Se in the region of the intrinsic absorption edge in polarized light. The absorption edge for light polarized normal to the optical axis of the crystal is displaced towards longer wave lengths. The absorption max. of hexagonal Se for a wave length of 0.6 μ is interpreted as the max. corresponding to interaction between neighboring chains, and in connection with this, the position of the absorption edge of different modifications of Se is discussed (ct. Caldwell and Fan, CA 53, 18638i). 33 references.   A. Kremheller

69143

Z/037/60/000/01/004/014
E024/E520

24.7100

AUTHOR: Prosser, Václav

TITLE: The Preparation and the Optical Constants of Monoclinic
            α-Selenium

PERIODICAL: Československý časopis pro fysiku, 1960, Nr 1,
            pp 35-40 + 92a (plate)

ABSTRACT: The methods of preparation described in Refs 2 and 6
            were modified in the following way. The amorphous
            selenium was ground to a fine powder. It was then
            extracted in a Soxhlet's apparatus with H_2S. After
            several extractions, the solution was transferred to the
            vessel shown in Fig 2. The crystals grew on the cooled
            U-shaped tube (K).   No seed crystals were necessary.
            The optimum conditions are that the temperature of the
            cooler is 15-20°C and that the temperature of the
            saturated solution falls, within approximately half-an-
            hour, from 55°C to 25-30°C.   At this temperature, the
            crystals continue their growth for about 4 hours.
            Afterwards, they start dropping to the bottom of the
Card 1/3   vessel.   The monocrystals had, generally, dimensions up

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The Preparation and the Optical Constants of Monoclinic α-Selenium

to approximately 5 x 5 x 0.5 mm. For the optical measurements, 3 x 3 x 0.05 mm crystals with well formed crystallographic faces were used. Both the α and the β modifications were obtained in this way. Mixed crystals of selenium and sulphur were also obtained. The crystals were sorted by X-ray analysis. The optical constants in the vicinity of the absorption edge were determined at room temperature by measuring the intensity of transmitted and of reflected light: the method is described in Refs 9,10,11. The results were evaluated by the methods described in Ref 12. A glass monochromator with negligible stray light losses was used. The angle of incidence of the light beam on the crystals was less than 10°. The optical constants were measured with the following accuracies: the absorption constant $K(cm^{-1})$ to within 3%, the reflectivity R to 1% and the refractive index n to 1%. The results are shown in Table 2 and Fig 5. Fig 5 also shows the photoelectric sensitivity F

Card 2/3   of monoclinic selenium according to Ref 5 and the

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E024/E520

The Preparation and the Optical Constants of Monoclinic α-Selenium

absorption constant for hexagonal (Ref 16) and amorphous selenium (Ref 15). The present method is considerably quicker than previous methods and has produced good single crystals. The agreement of the X-ray data with those of previous authors is good (see Table 1). The optical constants cannot be compared because they have not been systematically determined previously. The shift of the absorption edge of monoclinic selenium relative to hexagonal selenium seems in good agreement with existing theoretical concepts. It seems, on the other hand, that the photoelectric sensitivity observed in Ref 5 was mainly due to impurities. In particular, it is likely that the monoclinic selenium contained a certain amount of the hexagonal component.

Card 3/3 There are 5 figures, 2 tables and 20 references, 3 of which are Czech, 2 Soviet, 9 German and 6 English.

ASSOCIATION: Katedra fysiky pevných látek Karlovy university v Praze (Chair of Solid State Physics, Charles University, Prague)

SUBMITTED: July 22, 1959

ACCESSION NR: AP4041980   Z/0055/64/014/007/0559/0560

AUTHOR: Konak, C.; Prosser, V.

TITLE: Temperature dependence of absorption edge of CdSe single
crystals

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 14, no. 7, 1964,
559-560

TOPIC TAGS: temperature dependence, absorption edge, cadmium selenide,
single crystal, absorption coefficient, photoconductivity maximum

ABSTRACT: The results of measuring the temperature dependence of
the absorption coefficient of CdSe in a wavelength range of 0.6 to
1 micron and a temperature range of 125 to 459K are given. Thin
plane-parallel plates 10 to 20 microns thick grown from the vapor
phase by Frerich's method were measured; a Zeiss mirror monochromator
and an M12Q photomultiplier tube were used in the measurements. The
temperature dependence of the absorption coefficient for $K = 10^3$ cm^{-1}
is shown graphically. This dependence was linear for the energy

Card 1/2

L 10915-66   EWP(e)/EWP(t)/EWP(b)   IJP(c)   JD/WH
ACC NR: AP6002038

SOURCE CODE: GE/0030/65/012/002/0697/0705

AUTHOR: Prosser, V.; Kuzel, R.

ORG: Department of Solid State Physics, Charles University, Prague

TITLE: Determination of parameters of complex energy bands in semiconductors from studies of free carrier Faraday rotation, Voigt effect, and transport properties

SOURCE: Physica status solidi, v. 12, no. 2, 1965, 697-705

TOPIC TAGS: semiconductor, Voigt effect, Faraday effect, energy band, band theory, Hall effect, semiconducting material, magnetooptics, transport property, semiconductor carrier

ABSTRACT: In view of the recently developed sensitive double-beam method which makes it possible to measure angles of rotation of the plane of polarization of the order of 10^{-2} degrees with good accuracy, the authors suggest that experimental magnetooptical data be used with data on transport properties to determine fundamental parameters of semiconductors with complex bands. The authors then derive general formulas for the Faraday rotation and the Voigt effect for the case of one type of carriers and several types of carriers and discuss the relationship between these phenomena and the general transport properties. The general formulas are then applied to the case when the valence band consists of three subbands. The theoretical data for diamond and germanium are compared with the experimental results. It is concluded that in the case of complex bands the Faraday rotation and the Voigt effect give valuable information in addition to the data obtained

Card 1/2

L-10915-66

ACC NR: AP6002038

from transport properties. The simultaneous investigation of optical and transport phenomena over sufficiently large ranges of wavelength, temperature, and carrier concentration should make it possible to separate different scattering mechanisms as well as contributions of interband transitions to the magnetooptical dispersive effects. Orig. art. has: 19 formulas and 2 figures.

[CS]

SUB CODE: 20   / SUBM DATE: 21Sep65/ ORIG REF: 001/ OTH REF: 017/
ATD PRESS: 4/70

Card 2/2

L 39637-65   EWA(h)/EWT(1)/T   Pz-6/Peb   IJP(c)   AT

ACCESSION NR: AP5006836   Z/0055/65/015/002/0128/0134

AUTHOR: Prosser, V.

TITLE: Sensitive method of measuring small changes in light intensities; its use in measurements of high effective masses in semiconductors from Faraday rotation

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 15, no. 2, 1965, 128-134

TOPIC TAGS: light intensity, light intensity measurement, semiconductor, Faraday rotation, diamond

ABSTRACT: The double-beam method was used for measuring small angles of Faraday rotation of an order of 10^{-3} deg. It can be used in any optical measurement investigating small changes of light intensities. The limiting sensitivity in this

12 equations.
Card 1/2

L 39637-65
ACCESSION NR: AP5006836
ASSOCIATION: Faculty of Mathematics and Physics, Charles University, Prague
SUBMITTED: 29Aug64   ENCL: 00   SUB CODE: SS, OP
NO REF SOV: 000   OTHER: 005

EXCERPTA MEDICA Sec 17 Vol 5/8 Public Health Aug 59

2400. DETECTION OF INVASIONS OF LOW INTENSITY WITH TRICHINELLAE
IN PIGS - Wykrywanie mało intensywnych inwazji włośni u świń - Prost E.
Zakł. Hig. Prod. Zwierzęcych WSR, Lublin - WIAD. PARAZYT. 1958, 4/5-6
(393-394)

The method of digestion is compared with the official trichinoscopic method. Pork
with insignificant Trichinella invasion was studied in 86 series of trichinoscopic
examinations. Subsequently, the trichinoscopic preparations submitted to digestion
were examined, and the number of Trichinellae determined. By the method of
digestion, larvae were found in every case, but with the trichinoscopic method,
in 21 cases (about 24%) no Trichinellae were found. On the whole, the trichinoscope
revealed only about 52% of the total number of Trichinellae detected by the method
of digestion. The latter method, although unsuitable for mass examinations, should
be advocated in dubious cases of trichinosis (presence of Trichinella-like forms)
or for special examinations.

FROST, Edmund
SURNAME, Given Names

Country: Poland

Academic Degrees: Doc dr

Affiliation: /not given/

Source: Warsaw, Medycyna Weterynaryjna, Vol XVII, No 6, June 1961,
        pp 336-338.
Data: "On the Value of Trichinoscopic Examinations."

PROST, Edmund

Studies on the incidence of human trichinosis. Wiadomosci parazyt.,
Warsz. 4 no.5-6:369; Engl. transl. 369-370 1958.

1. Z Zakladu Higieny Produktow Zwierzecych WSR w Lublinie.
        (TRICHINOSIS, epidemiology,
                (Pol))

PROST, Edmund

Detection of low-intensity trichinosis invasions in swine. Wiadomosci parazyt., Warsz. 4 no.5-6:393; Engl. transl. 394 1958.

1. Z Zakladu Higieny Produktow Zwierzecych WSR w Lublinie.
(TRICHINELLA
detection in port (Pol))

PROST, E.

"Research on the Application Antibiotics in the Production of Canned Meat;
a summary, P. 495, (MEDYCYNA WETERYNARYJNA, Vol. 8, No. 11, Nov. 1952, Warszawa,
Poland)

SO: Monthly List of East European Acce ions, (EEAL), LC, Vol. 4, No. 5,
May 1955, Uncl.

4

S

The Fuel and Metallurgical Industries of Soviet Russia. E. Prost. (Revue Universelle des Mines, 1936, vol. 12, Nov., pp. 460-474). The author reviews the Russian fuel and metallurgical industries. Under the heading of fuel, he discusses the magnitude and distribution of the coal reserves, progress and exploitation, external trade, &c.; he also deals with peat and oil. With regard to iron, he likewise reviews the reserves and their distribution, the output of manganese ore, the situation in the iron industry in 1913 and after the Revolution, measures employed for developing the industry, the Ural-Kusnetz Combine, the location of the works in 1934, proposed extensions, and considerations on the conditions to-day, &c.

A.S.B.-S.L.A   METALLURGICAL LITERATURE CLASSIFICATION

PROST, E.; CIESLA, E.

Some observations on swine erysipelas from the point of view of the hygiene of food products. p. 253. (MEDYCYNA WETERYNARYJNA. Vol. 9, no. 6, June, 1953)

SO: Monthly List of East European Accessions, L.C., Vol. 3, No. 4, April, 1954

CA   /2

Salting and preservation of animal fats, especially salt pork. Edmund Prost (Univ. Marie Curie Skłodowska, Lublin, Poland). *Med. Weterynar.* 7, 680-3(1951).—The technology of handling animal-fat production is reviewed. Chemically rancidity is controlled best by treatment with 0.25% tannic acid or a 1:1 mixt. of 0.01% tannic acid and 0.01% citric acid. The salting process (5000 g. NaCl, 200 g. sugar, 75 g. KNO₃ rubbed into every 100 g. of pork fat) for exported products requires a 3½% NaCl content on the surface after 10 days of cold storage. When samples are treated with one-half of above salting mixt. the first day and with the rest on the 3rd day, 16-day curing at 0° does not give the required 3½% NaCl, curing at 4° is satisfactory and the acidity of the fat is negligible. At 8° the rancidity

(yellow color, bitter taste) after 16 days is commercially prohibitive.
                                                                    S. Roberts

C A

12

Deposits on stored sausages. Edmunt Prost (Univ. Marie Curie Sklodowska, Lublin, Poland). *Med. Weterynar.* , 331(1951).—Bacterial deposits are formed due to moisture and bad ventilation during storage and they can be washed off with dil. HOAc. Molds usually penetrate and make the sausage (I) inedible. Yeast deposits formed on moist storage disappear on drying. Chem. deposits, mostly $Na_2HPO_4.2H_2O$ or $Na_2HPO_4.12H_2O$, are of unknown origin, but probably are due to enzymic dephosphorylations in the minced tissues. *Tyroglyphus farinae* and *T. siro* are the most common parasitic deposits. All deposits can be either reduced or avoided by using artificial tubing for I

I. Z. Roberts

1952

POLAND

PROST, Edmund [Affiliation not given], D

"Eighth Session of the Section of Hygiene of Food Products of the Scientific Association of Veterinary Medicine in the German Democratic Republic (East Germany]

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 7, Jul 63, pp 404-405

Abstract: Report on the meeting in title held in Ostseebad Kühlungsborn on 14-16 May, 1963, where Docent, Dr. Edmund Prost of Lublin and Docent, Dr. Stanislaw Zaleski of Olsztyn represented Poland, with a listing by sections of participants and titles of papers read. There are no references.

1/1

POLAND

PROST, Edmund [Affiliation not given]

"The Problem of Brucellosis in the Hygiene of Food Products."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 6, Jun
63, pp 310-314.

Abstract: The author discusses the various types of patho-
genic Brucella and their predominant specificity in the
species of domestic animals and man, against the background
of conflicting incidence of the disease in animals and humans.
He takes issue with prevailing sanitary regulations concern-
ing slaughter meat in the USSR and Western countries, and
calls for universal regulations concerning all meats and
meat products for the effective control of this disease.
The 37 references comprise one Soviet source, the others
being about one half each German and Western.

| 1/1   _|

[POLAND

BEKAJLO, Romuald and PROST, Edmund, Chair for the Hygiene
of Animal Products (Katedra Higieny Produktow Zwierzecych),
Veterinary Division (Wydzial Weterynaryjny), WSR [Wyzsza
Szkola Rolnicza, Higher School of Agriculture] in Lublin
(Director: Docent, Dr. Edmund PROST)

"Colibacteriosis of Slaughter Chickens."

Abstract: [Authors' English summary modified]   A sanitary
veterinary study covering 30,230 chickens revealed 211 or
0.7 percent cases with pericarditis serofibrinosa. The
pathogenic agent was disclosed to be E coli of serotypes
071, 08, and 03. Bacteriological examination of the muscle
tissue of the affected animals revealed a strong bacteria-
emia with E. coli, and the authors recommend that such
chicken should be marked as conditionally fit for consump-
tion.   There are 9 references, of which 2 are Polish, 3
German, and 4 English.

1/1

PROST, Edmund, doc, dr.(Lublin)

Research on brucellosis in cattle with regard to the sanitary and
veterinary evaluation of the meat. Rocz nauk roln wet 70 no.1/4:
409-411 '60.
(EEAI 10:9)
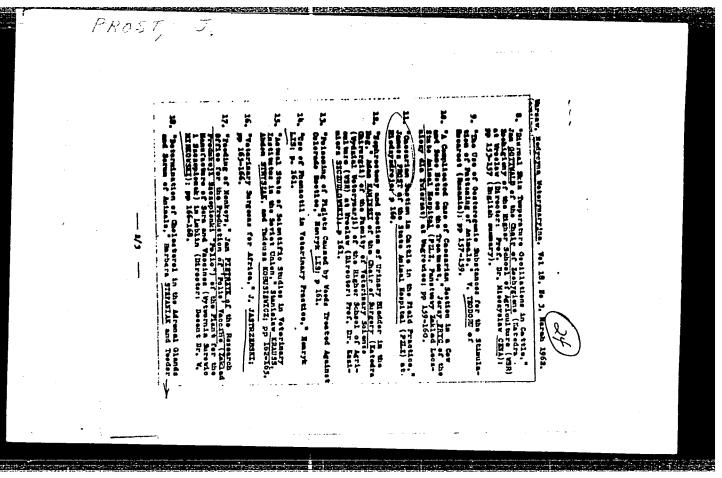
(Cattle)   (Brucellosis)   (Meat)

POLAND

BOJARSKI, Jan, Chair of Sanitation of Animal Products of the Veterinary
College o⁻ the Agricultural University, Lublin (Katedra Higieny Produktow
Zwierzecych Wydz.Wet.WSR) Head (Kierownik) Prof. Dr. Edmund PROST

"Pathogenic Microorganisms in the Slaughterhouse Pipes. Microorganisms of
Salmonella Type"

Lublin, Medycyna Weterynaryjna, Vol 22, No 11, Nov 66; p. 670-671

Abstract [English summary modified]: From September 1965 to February 1966,
560 samples of drain-water effluent from the Lublin slaughterhouse revealed
3 samples to be contaminated with Salmonella: 2 strains of Salmonella dublin
and 1 of Salmonella choleraesuis kunzendorf. This is much better than com-
parable data for several other European slaughterhouses. 2 tables, 1 Polish,
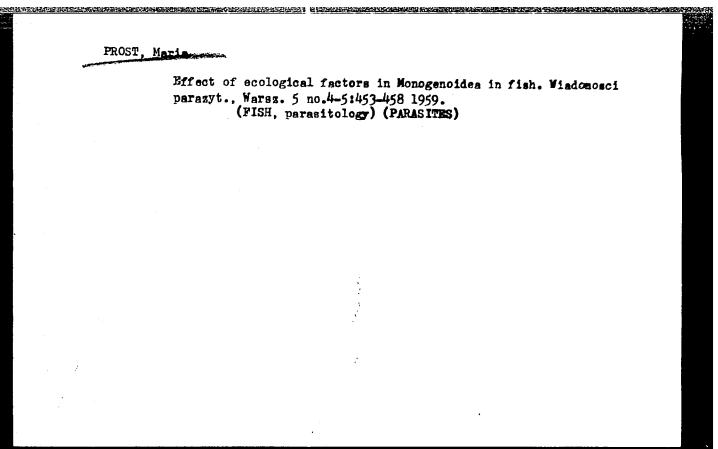8 German references, including 2 theses.

1/1

PROST, J.

Przeglad Hodowlany, Veterinaria, Vol 10, No 3, March 1962.

8. "Thermal Rain Temperature Oscillations in Cattle," Jan GOTOWALA, of the Chair of Zoohygiene (katedra Zoohigieny) of the Higher School of Agriculture (WSR) at Wroclaw (Director: Prof. Dr. Mieczyslaw CENA); pp 135-137 (English summary).

9. "The Use of Oestrogenic Substances for the Stimulation of Fattening of Animals," V. TRDDORU of Bucarest (Rumania); pp 137-139.

10. "A Complicated Case of Caesarian Section in a Cow and Some Notes on the Treatment," Jerzy PROST, of the State Animal Hospital (PZLL, Panstowy Zaklad Leczniczy dla Zwierzat) at Wschowa; pp 139-140.

11. "Caesarian Section in Cattle in the Field Practice," Janusz PROST of the State Animal Hospital (PZLZ) at Hrubieszow; p 140.

12. "Topharracy and Bection of Urinary Bladder in the Cow," Jan KAMINSKI of the Chair of Surgery (Katedra Chirurgii) of the Faculty of Veterinary Science (Wydzial Weterynarii) of the Higher School of Agriculture (WSR) at Wroclaw (Director: Prof. Dr. Kazimierz SKIERSKOWSKI; pp 141.

13. "Poisoning of Pigiots Caused by Feeds Treated Against Microbe Decline," Henryk LIS; p 141.

14. "Use of Penecilli in Veterinary Practice," Henryk LIS; p 161.

15. "Armed State of Scientific Studies in Veterinary Medicine in the Soviet Union," Stanislaw KRAUSE, Adam STRYSZAK, and Tadeusz KOBUSIEWICZ; pp 162-163.

16. "Veterinary Services for Africa," J. JASTRZEBSKI; pp 163-164.

17. "Landing of Monkeys," Jan PILARSKI of the Research Office for the Production of Polio Vaccine (IZRO at Warsaw): Epidemiological Problems of the Plant for the Manufacture of Sera and Vaccines (Wytwornia Surowic i Szczepionek) in Lublin (Director: Docent Dr. K. RINGEMAN); pp 164-165.

18. "Determination of Cholesterol in the Adrenal Glands and Sera of Animals," Barbara STURZYK and Teodor STURZYK; pp 165-166.

2/3

PROST, Maria

Investigations on the development and pathogenicity of Dactylogyrus
anchoratus (Duj., 1845) and I. extensus Mueller et v. Cleave,
1932 for breeding carps. Acta parasit Pol 11 no.1/4:17-48 '63.

1. Department of Parasitology and Parasitic Diseases, Agricultural
University College, Lublin. Head: prof. dr Fugeniusz Barnowski.

PROST, Maria

Effect of ecological factors in Monogenoidea in fish. Wiadomosci
parazyt., Warsz. 5 no.4-5:453-458 1959.
(FISH, parasitology) (PARASITES)

POLAND

PROST, Maria [Affiliation not given]

"Department of Parasitology in the Veterinary Faculty in Brno."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 1, Jan 63, pp 47-48.

Abstract: Authors report on the department following a personal visit. No references.

1/1

PROST, Maria

Studies on the application of proteolytic enzymes of vegetable origin
in ascariasis in chickens. Wiadomosci parazyt., Warsz. 4 no.5-6:583-
584; Engl. transl. 584-585 1958.

1. Z Zakladu Parazytologii i Chorob Inwazyjnych WSR w Lublinie.
        (PROTEASES, ther. use,
              ascariasis in chickens (Pol))
        (ASCARIASIS, ther.
              proteases, in chickens (Pol))
        (FOWLS, DOMESTIC, dis.
              ascariasis, protease ther. (Pol))

PROST, Maria

Effect of water salinity on Monogenoidea in fish gills. Wiadomosci
parazyt., Warsz. 4 no.5-6:637; Engl. transl. 638 1958.

1. Z Zakladu Parazytologii i Chorob Inwazyjnych WSR w Lublinie.
        (FISH, diseases,
                Monogenoidea infect., eff. of salinity (Pol))

PROST, Maria

Vegetable proteolytic enzymes in the treatment of human and animal
helminthiases. Wiadomosci parazyt. Marsz. 4 no.4:323-329 1958.

1. Z Zakladu Parazytologii i Chorob Inwazyjnych W. S. R. w Lublinie.
       (PROTEASES, ther. use,
            helminth infect., review (Pol))
       (ANTHELMINTICS, ther. use,
            proteases, review (Pol))

PROST, Maria (Lublin)

Monogenoidea in gills of fish in Vistula. Wiadomosci parazyt.,
Warsz. 2 no. 5 Suppl: 259-260. 1956..

1. Katedra Parazytologii I Chorob Inwazyjnych WSR.
  (FISH, diseases,
    Monogenoidea infect. of fish in Vistula (Pol))
  (PARASITIC DISEASES, epidemiology,
    Monogenoidea infect. of fish in Vistula (Pol))

POLAND

PROST, Maria; and STUDNICKA, Maria, Department of Fish Breeding of the
Veterinary College of the Agricultural University (Zaklad Chorob Ryb
Wydzialu Weterynarii WSR) Head (Kierownik) Docent Dr. Maria PROST, Lublin

"Investigation on the Use of Organic Esters of Phosphoric Acid in the
Control of External Parasites of Farmed Fish. Control of the Invasion
of Parasites of Dactylogyrus and Gyrodactylus"

Abstract [English summary modified]: Continuation of study on use of
organic phosphates in the treatment of fish parasites: Red-Chinese-made
chlorophos, Bayer's Neguvon, and East German Trichlorphon were studied.
Dactylogyrus parasites were rather resistant; best results were made by
treating the fish right in the pond with Neguvon 1:750,000 for 24 hours,
or 1:1,000,000 for 48 hours at water temperatures of 18-24 C; this
cured all the young carp and was safe to fish, but not to the natural
food of the fish; Cladocera, Copepodes, insect larvae, etc. all died,
indicating that the young carp must be treated in the pond just before
latter is fished out, or else fish would starve while being cured of
their infection. 4 tables; 1 Polish, 3 Western references.

1/1

PROST, M.

New views on methods of research and problems of ichthyoparasitology. p. 156
MEDYCYNA WETERYNARYJNA. Vol. 9, no. 4, Apr. 1953.

SO: Monthly List of East European Accessions, L.C., Vol. 3, No. 4, April, 1954

PROSTAKOV, A., inzh.-kapitan 1 ranga

Hydroacoustics. Voen. znan. 41 no.1:36-37 Ja '65.
(MIRA 18:2)

PROSTAKOV, A.Ye.

Stalingrad Branch of the All-Union Society of Soil Scientists in 1957 and 1958. Pochvovedenie   no.10:122   O '59.
(MIRA 13:2)

(Stalingrad Province—Soil research)

SOV/124-58-3-3115

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 81 (USSR)

AUTHOR: Prostak, F. A.

TITLE: An Experiment in the Calibration of a Metering Weir (Opyt tarirovaniya mernogo vodosliva)

PERIODICAL: V sb.: Gidroturbostroyeniye. Nr 4, Moscow-Leningrad, Mashgiz, 1957, pp 73-92

ABSTRACT: The author describes in detail the calibration of the metering weir of the small low-head stand of the Water-turbines Laboratory of the Leningrad Metals Plant. The maximum discharge of the sharp-crested weir is 264 liter/sec with a head on the crest of 405 mm. The width of the trough is 500 mm. The calibration was made with a uniform distribution of velocities in the vertical and horizontal planes of the feeding trough, which was accomplished by the installation of transition fairing. From the results of the calibration, values of the discharge coefficient were calculated; these coincided best with the results of calculations made in accordance with the Swiss Society of Engineers and Architects and the T. Rehbock weir formulae. The formulae of Bazin and
Card 1/2   Hansen produced deviations greater than the two former ones.

SOV/124-58-3-3115

An Experiment in the Calibration of a Metering Weir

It has been established that the relationship $Q = f(H)$ for a weir is influenced by the shape of the velocity distribution upstream of the weir; therefore, when using any empirical formulae of the discharge coefficient it is recommended that one make sure that the velocity distribution is actually similar to that distribution for which a certain formula was obtained.

V. V. Fandeyev

Card 2/2

PROSTAKISHIN, G.P.; SHKODICH, P.Ye.

Refractometric method of determining the dried defatted
residue of milk. Vop.pit. 22 no.1:57-59   Ja-F'63
(MIRA 16:11)

1. Iz kafedry gigiyeny pitaniya (zav. - prof. M.P. Bolotov)
Irkutskogo gosudarstvennogo meditsinskogo instituta.

*

L 29980-65   EEO-2/FSS-2/EWT(1)/EWA(d)/EWA/EED-2/FCS(k)

ACCESSION NR: AP5005019   S/0017/65/000/001/0036/0037

AUTHOR: Prostakov, A. (Engineer, Captain of first rank)

TITLE: Hydroacoustics

SOURCE: Voyennyye znaniya, no. 1, 1965, 36-37

TOPIC TAGS: hydroacoustics, underwater equipment hydrophone, homing torpedo, sonar

ABSTRACT: The development of the modern submarines (including atomic powered ones for long submerged cruises, carrying weapon systems capable of being fired while submerged) has stimulated research and development in underwater detection and communication. Electromagnetic waves do not penetrate water for long distances, and acoustic devices must be relied on (a 22.5-kg charge exploded off the shore of Australia was detected acoustically 19200 km away at Bermuda 3 hours 43 minutes

L 29980-65

ACCESSION NR: AP5005019 O

Such systems have reported effectiveness for distances up to 220 km. Since these systems are only passive listening devices, an active hydrolocator (sonar) has been perfected. An acoustic pulse is radiated from a complex antenna and is then shifted to a receiving antenna for registering the echo. This system will pick out any object which reflects the acoustic pulse (ships, whales, rocks, etc). It completely determines the coordinates of the target, target depth course, and speed. All such information is automatically recorded and fed to fire control systems. For antisubmarine aircraft, hydrophone buoys have been developed. They can be dropped by a plane into the water. The buoy then lowers a listening micro-scope and transmits by radio to the search plane any noises it picks up. The plane can then attack the submarine with either homing torpedoes or homing rocket torpe-does. Work has been completed on an echo ice meter which gives a continuous dia-

L 64997-65   EWT(1)

ACCESSION NR: AP5017055   UR/0375/65/000/007/0073/0079

AUTHOR: Prostakov, A. L (Candidate of naval sciences, Docent, Engineer, Captain)

TITLE: Nonacoustic techniques for detecting submarines

SOURCE: Morskoy sbornik, no. 7, 1965, 73-79

TOPIC TAGS: radar detection, submarine, magnetic detection equipment, magnetic detection, laser detector, laser detection, laser, detection equipment, detection system, optic detection

ABSTRACT: Hydroacoustic techniques for detecting submarines have been widely used in the past despite the fact that sound waves from submarines are subject to refraction and interference, are difficult to distinguish among waves from other sources, are propagated slowly, and cannot be detected by aircraft.

erers,   the latter being used to detect atomic submarines.

Antisubmarine aircraft use side-looking radars, such as the American AN/APQ-55. The possible use of radars operating in the mm radio-wave range

Card 1/3

L 64997-65

ACCESSION NR: AP5017055

(36— 46 Ghz) for the detection of changes in the reflecting properties of the ocean surface due to the movement of a submerged submarine is being investigated. A widely used type of magnetometer detects ferromagnetic bodies, such as submarines, by reacting to an increase in the stabilized magnetic field in-

The use of ultrasonic television, so-called "phonovision," is limited because ultrasonic waves are heavily damped in water. The use of lasers operating in the blue-green spectrum range, the waves of which are least absorbed by water, as well as the use of glass with neodymium admixtures or a liquid containing admixtures of terbium as active materials in lasers operating underwater, is now being studied. It is not yet known if the present 900-m range of underwater lasers can be extended.

Card 2/3

ASSOCIATION: none

SUBMITTED: 00 　　　　　　ENCL: 00 　　　　　SUB CODE: DC, MS

NO REF SOV: 000 　　　　　OTHER: 000 　　　　ATD Press 4073-F

Card 3/3

L 6287-66   EWT(d)/EPA/EWT(m)/EWP(f)/T-2/EWA(c)

ACC NR: AP5026841   SOURCE CODE: UR/0286/65/000/017/0134/0134

INVENTOR: Prostakov, A. L.

ORG: none

TITLE: Intermediate air cooling system for a multistage compressor of a turbojet engine.   Class 46, No. 79921

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 134

TOPIC TAGS: turbojet engine, gas turbine engine, jet engine

ABSTRACT: An Author Certificate has been issued for an intermediate air cooling system in a multistage compressor of a turbojet engine, using air-air heat exchangers mounted in a duct. In order to reduce the inner aerodynamic resistance of the exchanger assembly, the cooling air flowing through the duct is ejected by the flow of gases which is discharged from the engine exhaust nozzle.   [AV]

SUB CODE: PR/ SUBM DATE: 27Sep47/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4/34

Card 1/1

PROSTAKOV, A.L., kand. voyenno-morskikh nauk, dotsent, inzhener-kapitan
1-go ranga

Nonacoustic means of detecting submarines. Mor. sbor. 48
no.7:73-79 Jl '65.   (MIRA 18:8)

ACC NR: AP6033311   SOURCE CODE: UR/0375/66/000/010/0068/0071

AUTHOR: Prostakov, A. L. (Docent; Candidate of military sciences; Engineer; Captain of first rank)

ORG: none

TITLE: Submarine noise reduction methods

SOURCE: Morskoy sbornik, no. 10, 1966, 68-71

TOPIC TAGS: acoustic noise, submarine, *marine engineering, screw propeller, ship building engineering*

ABSTRACT: The problems of designing submarines to reduce noise are discussed. Theoretical research is first conducted in laboratories on models, and ultimately tests are conducted on actual submarines. To combat noise problems, submarine design has been modified to make the ship smoother, with all possible protruding objects including acoustic antennas being removed. The greatest source of noise in submarine is the screw propellers. In order to decrease this noise, screw propellers are being built with greater diameter and with four to five blades, and they rotate more slowly. The stern tip of the submarine's hull has been elongated so that the convergence angle is about 10°. This measure has decreased the chances of their being recognized by sonar. Further steps to prevent detection include the use of synthetic and rubber materials in vibrating parts, lining of the inner hull surface with lead or fiber glass insulation, and sound-proof coverings for doors, hatches, and instruments.

Card 1/1 SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 002

PROSTAKOV, A.L., dotsent, kand.voyenno-morskikh nauk, inzhener-kapitan 1-go ranga

Prospects for increasing the range of hydroacoustical means of observation. Mor. sbor. 47 no.11:67-74 N '63.   (MIRA 16:11)

PROSTAKOV, Anatoliy Leonidovich; LAPSHIN, V.P., kand. voenno-morsk.
nauk, retsenzent;STASHKEVICH,A.P.,otv.red.; LESKOVA,L.R.,red.

[Underwater acoustics in foreign navies; according to
materials of the foreign press] Gidroakustika v ino-
strannykh flotakh; po materialam zarubezhnoi pechati. Le-
ningrad, Sudostroenie, 1964.   154 p.   (MIRA 17:4)

PROSTAKOV, Anatoliy Leonidovich, kand.voyenno-morskikh nauk, inzh.-kapitan
2 ranga; KARASEV, A.Ye., kapitan 1 ranga, red.; MEDNIKOVA, A.N.,
tekhn.red.

[Antisubmarine defense of merchant ships; from the experience of
foreing fleets] Protivolodochnaia oborona torgovykh sudov; po
opytu inostrannykh flotov. Moskva, Voen.izd-vo M-va obor.SSSR,
1960. 171 p.   (MIRA 13:10)
                    (Submarine warfare)

PROSTAKOV, Anatoliy Leonidovich; VYZVILKO, S.A., inzh.-kapitan 2
         ranga, red.; SRIBNIS, N.V., tekhn. red.

[Underwater acoustics in the navy] Gidroakustika v voenno-
morskom flote. Moskva, Voen.izd-vo M-va oborony SSSR, 1961.
139 p.   (MIRA 15:2)
         (Underwater acoustics)   (Naval reconnaissance)

PROSTAK, P.A., kand. tekhn. nauk.

Calibration of a spillway for flow measurement. [Trudy] LPI no.4:
73-92 '57.   (MIRA 11:4)
                              (Hydraulic engineering)

LEVENBERG, I.G., kand.veterinarnykh nauk; IVANTSOV, L.I.; PROSTAKOV, M.P.

Stachybotryotoxicosis in cattle. Veterinariia 38 no.10:38-41
O '61.   (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii (for Levenberg).2.Upravleniye veterinarii Ministerstva
sel'skogo khozyaystva RSFSR (for Ivantsov). 3. Nachal'nik
veterinarnogo otdela Kurskogo oblastnogo upravleniya sel'skogo
khozyaystva (for Prostakov).
          (Cattle--Diseases and pests)   (Fungi, Pathogenic)

PROSTAKOV, M. P., LEVENBERG, I. G. and IVANTSOV, L. I. (Head of Veteri-
nary Department, Kursk Oblast' Administration of Agriculture; Candidate
of Veterinary Sciences, All-Union Scientific-Research Institute of Veteri-
nary Sanitation; and Chief Veterinary Surgeon, Administration of Veteri-
nary Medicine, RSFSR Ministry of Agriculture)

"Stachbotrys toxicosis in cattle"

Veterinariya, Vol. 38, no. 10, October 1961, pp. 3ᵉ

Prostakov, - Hd. Vet. Dept. Kursk. Oblast' Admin of Agric

LEVIN, A.I.; PROSTAKOV, M.Ye.

Passivation of tin plate as a means for protecting food containers
from corrosion. Kons. i ov. prom. 14 no.11:18-22 N '59.
(MIRA 13:2)

1.Ural'skiy politekhnicheskiy institut imeni S.M. Kirova (for Levin)
2.Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (for
Prostakov).
       (Tin plate--Corrosion) (Tin cans--Corrosion)

S/137/61/000/011/115/123
A060/A101

AUTHORS: Shayevich, A.B., Prostakov, M.Ye.

TITLE: Determining the composition of the surface layers of metals,
              alloys, and electrically nonconducting substances by the method
              of spectral analysis of large portions of the specimen surface

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 8, abstract
              11K46. ("Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chern.
              metallov", 1960, No 8, 108 - 110)

TEXT: In order to determine the quantity of Cr deposited on the sur-
face of tin plate specimens in the shape of circular disks 70 mm diameter were
subjected to spectral analysis. A condensed spark obtained by means of a stan-
dard generator ИГ-3 (IG-3) (L 0.01 μf. H 0.05 mh) was used as the exciting
source. The spectra obtained in the first and subsequent spark treatments of
one and the same portion of the surface of the specimen, contain the lines of
Cr, Sn, and Fe. The intensity of these lines varies in accordance with the
variation in the concentration of the elements from the surface to the depth

Card 1/2

Determining the composition of the S/137/61/000/011/115/123
A060/A101

of the specimen. The Cr content in the surface layer constituted about $4 \cdot 10^{-10}$ g/cm^2. An estimate was made of the stability of the passive films on the tin plate in solutions of alkalis and acids as a function of variation in temperature of the solutions, and the composition of the surface layer of passivated spe- cimens of galvanized Fe, of brass Л62 (L62) and of electrolytic Cu clad with Sn-Pb solder was determined. In order to determine the composition of electri- cally nonconducting surface layers or of layers on nonconducting backings, it is possible to use two electrodes of neutral materials, situated at an angle of $\sim 45^\circ$ to the surface of the specimen, and the arc is ignited between these electrodes.

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

PROSTAKOV, M. Ye.

Cand Tech Sci - (diss) "Study of processes of passivation of tin and zinc surfaces in alkaline solutions." Sverdlovsk, 1961. 16 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Ural Polytechnic Inst imeni S. M. Kirov); 150 copies; price not given; (KL, 5-61 sup, 192)

S/081/62/000/012/019/063
B168/B101

AUTHORS: Shayevich, A. B., Prostakov, M. Ye.

TITLE: Determination of the composition of surface layers of metals, alloys and non-conducting materials by spectrum analysis of large areas of the surface of a sample

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 163, abstract 12D140 (Sb. "Nekotoryye vopr. emission. i molekulyarn. spektroskopii". Krasnoyarsk, 1960, 78 - 81)

TEXT: The application of spectrum analysis methods to the study of the composition of thin surface layers is limited by the relatively large depth effect of the arc or spark discharge. In order to eliminate this disadvantage it is proposed that the moving-electrode method should be used. With this method the specimen being analysed is continuously displaced in relation to the upper electrode during the spectrum-recording process. The extent to which the affected depth of the surface layer can be reduced is limited in this case by the depth affected by the single spark discharge - either by the unit spark of the a.c. arc or by the per-

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Determination of the composition of ...   S/081/62/000/012/019/063
                                           B168/B101

sistence of the d.c. arc. The advantage of this method lies in the fact
that the non-uniformities of the layer under examination are averaged out.
The specimens being analyzed are moved by means of an $C\text{Д}-2$ (SD-2) elec-
tric motor which rotates a moving stage at a speed of 1 rpm. The spectra
are excited in the discharge of a condensed spark from an $И\text{Г}-3$ (IG-3)
generator (C = 0.01 µf, L = 0.05 mh). A study of the surface composition
of unpassivated, electrochemically passivated and chemically passivated
samples of tinplate showed that $4 \cdot 10^{-10}$ g Cr per cm^2 of surface was
present in the case of the last group of samples only, which agrees with
the authors' theory of the rules governing passivation. For determina-
tion of the composition of non-conducting surface layers it is possible
to use two electrodes of inert materials set at an angle of 45° to the
surface of the specimen. The substance of the surface layer is vaporized
by drawing the flame of the arc downwards by means of a superimposed
magnetic field. Results of analyses by this method depend largely on the
structure and composition of the specimen. [Abstracter's note: Complete
translation.]

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PROSTAKOV, M.Y.

Passivation of tin plate. Kon.i ov.prom. 17 no.11:27-30 N '62.
(MIRA 15:11)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.
(Tin-plate--Corrosion)

LEVIN, A. I.; PROSTAKOV, M.Ye.; KOCHERGIN, V.P.

Thickness of passive films on tin and their protective action.
Zhur. prikl. khim. 33 no.9:2102-2108 S '60.   (MIRA 13:10)

1. Ural'skiy politekhnicheskiy institut im. Kirova i Ural'skiy
nauchno-issledovatel'skiy institut chernykh metallov.
          (Films (Chemistry))   (Tin)   (Passivation)

S/081/61/000/002/003/023
A005/A105

Translation from: Referativnyy zhurnal, Khimiya, 1961, No. 2, p. 283, # 21221

AUTHORS: Prostakov, M.Ye., Kochergin, V.P., Levin, A.I.

TITLE: The Investigation of Corrosion of Passivated Tin Plate

PERIODICAL: "Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chern.metallov",
              1959, No. 7, pp. 76 - 82

TEXT: The investigation of the corrosion rate of non-passivated, chemical-
ly and electrochemically passivated tin plate showed that the passivation of tin
plate increases its resistance to aggressive media: electrochemically passivated
tin plate has a higher corrosion resistance than chemically passivated tin plate
in 3% CH_3COOH, tomato sauce, NaCl, and animal fat. Chemically passivated tin
plate is resistant under the conditions of action of fish preserves. It is estab-
lished that the corrosion of tin plate in a gas medium totally depends on its coat-
ing porosity and is independent on the passivation method.
                                                  From authors' summary

Translator's note: This is the full translation of the original Russian abstract.

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KOCHERGIN, V.P.; PROSTAKOV, M.Ye.; NIMVITSKAYA, A.T.

Porosity of tin plate coating. Kons. i ov. prom. 14 no.11:22-27
N '59.
(MIRA 13:2)

1.Ural'skiynauchno-issledovatel'skiy institut chernykh metallov.
(Tin cans--Corrosion)

137-58-6-12914

AUTHORS: Tsekhanskiy, M.I., Prostakov, M.Ye., Kolpakov, I.P.

TITLE: On the Reasons of Formation of "Bubble" Flaws on White Tin
            and Preventive Methods Therefor (O prichinakh vozniknoveniya
            poroka "puzyr'" na beloy zhesti i merakh bor'by s nim)

ABSTRACT: The causes of the fault are the following; sulfide and sulf-
            oxide impurities in the steel; insufficient and nonuniform heat-
            ing of ingots in the absence of turning manipulation; H_2 diffusion
            into the defective areas of the metal during the pickling of the
            tin. In order to avoid the formation of "bubbles" and to im-
            prove the quality of the tin, the content of S in the finished steel
            should be $\leq$ 0.03%; the loading of ingots into the heating kiln
            should be done at 700-800°C; the temperature of sulfuric-acid
            pickling solution during the rough pickling process should be
            $\leq$ 65°; the activity of the addition agent should be $\geq$ 85%.
                                                                           G.K.
            1. Steel--Coatings   2. Tin coatings--Properties
Card 1/1   3. Steel--Pickling

LEVIN, A.I.; PROSTAKOV, M.Ye.; KOCHERGIN, V.P. (SVERDLOVSK)

Anodic passivation of tin plate in sodium hydroxide solutions.
Zhur.fiz.khim. 34 no.5:1117-1120 My '60.   (MIRA 13:7)

1. Ural'skiy institut metallov i Ural'skiy politekhnicheskiy
institut im. S.M.Kirova, Sverdlovsk.
        (Tin plate)   (Passivation)

137-58-6-13906

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 385 (USSR)

AUTHORS: Shayevich, A.B., Kobyakova, E.V., Men'shikova, Z.P., Prostakov, M.Ye.

TITLE: Spectrometric Analysis for Iron, Tin, and Zinc in the Flux of Tin-plating Equipment (Spektral'nyy analiz flyusa ludil'nykh apparatov na zhelezo, olovo i tsink)

PERIODICAL: Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chernykh metallov, 1957, Nr 3, pp 169-172

ABSTRACT: A weighed portion is dissolved in HCl. The introduction of the dissolved matter into the discharge zone is accomplished by burning an ash-free filter paper impregnated with the solution being analyzed. A description of the device by means of which this incineration is performed is given. Photography is made by the ISP-22 spectrograph with an exposure of 50 sec; spectra are produced by an A-C arc, with a current of 6 amp. Analytical pairs of lines are: Sn 2661.25 - Zn 2756.45, Fe 2730.55 - Zn 2756.45. The mean-square error of three determinations is $\sim$5%. A comparative table of the results of spectrographic and chemical analyses of the fluxes is adduced.   1. Iron--Determination 2. Tin--Determination 3. Zinc--Determination 4. Spectrographic analysis--Applications   A.Sh.

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SHUBINA, S.B.; SHAYEVICH, A.B.; PROSTAKOV, M.Ye.; BASOVA, Ye.P.

Simplified method for determining tin content of canned
food by means of spectrum analysis. Kons.i ov.prom. 14
no.12:30-31 D '59.   (MIRA 13:3)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov.
         (Food, Canned--Analysis) (Tin--Spectra)

SOV/133-59-3-19/32

AUTHORS: Kochergin, V.P., Prostakov, M.Ye. and Tarasova, A.A.

TITLE: Electrochemical Degreasing of Cold-rolled Sheets (Elektrokhimicheskoye obezzhirivaniye kholodnokatanoy zhesti)

PERIODICAL: Stal', 1959, Nr 3, pp 252 - 254 (USSR)

ABSTRACT: The ability of emulsifying agents (sodium silicate, OP-7, OP-10, oleic acid and Petrov's reagent) for decreasing surface tension of a degreasing solution (containing: 10 g/litres NaOH, 23 g/litres Na_2CO_3 and 21 g/litres Na_3PO_4) at 70 - 90 °C was established. It was found that cathodic degreasing of sheets rolled with the application of aqueous emulsions of castor oil and emulsol should be carried out under the following optimum conditions: current density of 10-15 A/dm² (with palm oil emulsion - 25 A/dm²), temperature of the degreasing solution not lower than 80 °C. The duration of the process 1 - 3 sec. The concentrations of emulsifying agents in the degreasing solution are given in the text. There are 1 figure and 9 references, 7 of which are Soviet and 2 English.

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SOV/133-59-3-19/32

Electrochemical Degreasing of Cold-rolled Sheets

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (Urals Scientific Research Institute for Ferrous Metals)

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